

REMARKS

This amendment responds to the Office Action dated August 20, 2008 in which the Examiner objected to the abstract, rejected claim 5 under 35 U.S.C. § 101 and under 35 U.S.C. § 112, first paragraph and rejected claims 1-5 under 35 U.S.C. § 102 (e).

Applicants would like to thank the Examiner for acknowledging the Information Disclosure Statement filed September 29, 2005. However, the returned 1449 was not initialed next to each reference. Therefore, Applicant respectfully requests the Examiner provide a new PTO-1449 with initials by each reference.

Additionally, Applicant would like to thank the Examiner for acknowledgement of the claim for foreign priority. However, Applicant respectfully submits that box 12A₃ should be indicated rather than box 12A₁.

Additionally, Applicant respectfully requests the Examiner acknowledge the Information Disclosure Statement filed October 3, 2008 which provided the Examiner with copies of the references cited on July 31, 2008 in the corresponding Japanese application.

As indicated above, the Abstract has been amended to correct a minor informality. Therefore, Applicant respectfully requests the Examiner approves the correction and withdraws the objection to the Abstract.

As indicated above, claim 5 has been amended to be directed to statutory subject matter and to more particularly point out the invention. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claim 5 under 35 U.S.C. § 101 and under 35 U.S.C. § 112, first paragraph.

As indicated above, claims 1, 4 and 5 have been amended in order to make explicit what is implicit in the claims and for stylistic reasons. The amendment is unrelated to a statutory requirement for patentability.

Claim 1 claims an autonomous robot apparatus, claim 4 claims an information processing method for an autonomous robot apparatus and claim 5 claims a computer readable medium having a program for an autonomous robot apparatus. The robot apparatus communicates with a communication apparatus by radio and independently determines an action in accordance with an instruction from a user or a surrounding environment. The apparatus, method and program include measuring a quality of communication of radio signals received from the communication apparatus. The action, on the basis of the communication quality measured by the measuring means, is then determined. A process of allowing the robot apparatus to communicate the action determined by the determination to a user is performed.

By measuring a quality of communication of radio signals, determining an action and then allowing the robot apparatus to communicate the action to the user, as claimed in claims 1, 4 and 5, the claimed invention provides a robot apparatus, method and program which utilizes functions peculiar to the robot so that a user can be easily notified of a state of communication. The prior art does not show, teach or suggest the invention as claimed in claims 1, 4 and 5.

Claims 1-5 were rejected under 35 U.S.C. § 102 (e) as being anticipated by *Glenn, et al.* (U.S. Patent No. 6,763,282).

Glenn, et al. appears to disclose a system and method capable of using impulse radio technology to enhance the capabilities of a robot (column 3, lines 49-57). Thus, *Glenn, et al.* merely discloses the type of radio signals used by the robot. Nothing in *Glenn, et al.* shows, teaches or suggests measuring a quality of communication of radio signals as claimed in claims

1, 4 and 5. Rather, *Glenn, et al.* merely discloses the type of radio technology (impulse) used by the robot. Applicants note that the term “impulse radio” refers to a radio system based on short, low duty-cycle pulses (column 4, lines 24-25 of *Glenn, et al.*) and is not directed to measuring the quality of the communication.

Figure 11 of *Glenn, et al.* discloses a robot 902 and control station 904 that can be used in a manner to monitor and control the environment within a building 1102 (column 20, lines 23-26). The robot 902 includes one or more sensors 1006 that are remotely controlled by the control station 904 in a manner that allows one to monitor and control the environment within a building 102. The sensors 1006 obtain sensor related information which is modulated and forwarded in the impulse radio signals 908 toward the control station 904 (column 20, lines 36-43). The control station 904 can use the received environmental related information to control the heating and cooling equipment within the building (column 20, lines 53-56).

Thus, *Glenn, et al.* merely discloses obtaining sensor information. Nothing in *Glenn, et al.* shows, teaches or suggests measuring a quality of a communication of radio signals as claimed in claims 1, 4 and 5. Rather, *Glenn, et al.* merely discloses sensors forwarding information to a control station.

Finally, *Glenn, et al.* merely discloses in Figure 13 a method for controlling the actions of a robot 902. The robot 902 and attached impulse radio unit 910 communicate with a control station 904 using impulse radio signals 908 that contain information about the robot 902 and the area surrounding the robot 902. The control station 904 and monitoring personnel can then use the information conveyed in the impulse radio signals 908 to control the actions of the robot 902 (column 23, lines 66-column 24, line 15).

Thus, *Glenn, et al.* merely discloses controlling the actions of a robot based upon monitoring the information communicated by the robot about the robot and the surrounding area of the robot. Nothing in *Glenn, et al.* shows, teaches or suggests measuring a quality of radio signals as claimed in claims 1, 4 and 5. Furthermore, nothing in *Glenn, et al.* shows, teaches or suggests communicating an action, to a user, based upon the communication quality measured by the measuring means as claimed in claims 1, 4 and 5. Rather, *Glenn, et al.* merely discloses transmitting information about the robot and the area surrounding the robot to a control station.

Since nothing in *Glenn, et al.* shows, teaches or suggests measuring a quality of communication of radio signals, determining an action based on the communication quality and allowing the robot apparatus to communicate the action, determined based on the communication quality, to a user as claimed in claims 1, 4 and 5, Applicant respectfully requests the Examiner withdraws the rejection to claims 1, 4 and 5 under 35 U.S.C. § 102 (e).

Claims 2-3 depend from claim 1 and recite additional features. Applicant respectfully submits that claims 2-3 would not have been obvious within the meaning of 35 U.S.C. § 102 (e) at least for the reasons as set forth above. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 2-3 under 35 U.S.C. § 102 (e).

New claims 6-13 have been added and recite additional features. Applicant respectfully submits that these claims are also in condition for allowance.

The prior art of record, which is not relied upon, is acknowledged. The references taken singularly or in combination do not anticipate or make obvious the claimed invention.

Thus, it now appears that the application is in condition for a reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

CONCLUSION

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is requested to contact, by telephone, the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicant respectfully petitions for an appropriate extension of time. The fees for such extension of time may be charged to Deposit Account No. 50-0320.

In the event that any additional fees are due with this paper, please charge to our Deposit Account No. 50-0320.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicants



Date: October 24, 2008

By

Ellen Marcie Emas
Reg. No. 32,131
(202) 292-1530